LEVEL news

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Volume 2, Number 5 **May 13, 1994**

Levels Continue Seasonal Rise

Ice Disappears From Great Lakes

The heavy ice of the past winter had virtually disappeared from the Great Lakes by early May, leaving no significant damage in its wake.

While the heavier-than-usual ice cover was slow in leaving the lakes this year, the spring melt was relatively trouble-free. Although there was potential for ice jams in the connecting channels and for shoreline damage caused by loose ice floes, no significant events of this nature were reported.

The unusually long ice season on Lake Erie delayed removal of the Niagara River ice boom until April 21 through 28.

"We were fortunate this spring that both ice and water level conditions were favourable," noted Ralph Moulton, Manager of Environment Canada's Great Lakes Water Level Communications Centre in Burlington. "In spite of some earlier concerns, potential ice and flooding hazards did not materialize."

Precipitation was lower than normal in March for all the lakes except Lake Ontario, and above normal for all the lakes in April. Currently, the risk of flooding and erosion damage is low.

The level of Montreal Harbour took a temporary sharp climb in April due to higher spring flows from the Ottawa River and other tributaries to the St. Lawrence.

All of the lakes began May at levels higher than their long-term averages. Both Lakes Erie and St. Clair were above their averages by about 35 centimetres. Lake Superior continued very close to its long-term average level (5 cm above), while Lake Huron began the month at 20 cm above average, Meanwhile, Lake Ontario, which had been below its average level since February, rose to 10 cm above the mean for this time of year. All the lakes are expected to stay above average and to continue their seasonal rises through the summer. Montréal Harbour is forecast to be below average but above chart datum for the next six months.

Getting The Most From Your Water Level Bulletin

The Water Level Bulletin that is available electronically along with this newsletter contains historic as well as forecast information about the levels of the Great Lakes and Montréal Harbour.

1. The six graphs show the six-month water level forecast together with levels actually recorded since January of the year previous to the bulletin's release.
   The recorded levels are indicated by the curving black line that extends part way across the grid. The two dotted lines that diverge from the end of this line indicate the six-month forecast. They allow for extremely high water supplies (the top line) and extremely low water supplies (the bottom line). Depending upon supplies that actually occur, the water level is forecast to fall between these two lines.
2. You can compare recently recorded levels and the forecast with the long-term averages for each of the lakes or Montréal Harbour. The long-term averages are indicated by the undulating gray lines that extend the entire width of each graph.
   These averages are currently taken over the period 1918 - 1993 for the lakes, and 1967-1993 for Montréal Harbour. At the end of each year, averages for the next year's bulletins will include the data from the previous year.
3. Each graph also indicates the highest and lowest water levels recorded during the period of record. These are represented by bars corresponding to each month of the year, and are accompanied by the year in which the particular level was recorded.
4. For example, the maximum water level for Lake Erie in May was recorded in 1986. The record low occurred in 1934.
   The figures along the right hand side of the graph tell you that the record high water level elevation was slightly less than 175 metres (IGLD 1985).
   IGLD is short for International Great Lakes Datum, which is the reference system used for measuring Great Lakes-St. Lawrence levels. Elevations are measured in metres above a zero point in the St. Lawrence River that corresponds roughly to sea level. 175 metres on the graph can be interpreted as 175 metres above sea level. Each block on the graph represents 10 centimetres (20 cm at Montréal).
5. Using the figures on the left hand side of the graph, you will find that the May record high for Lake Erie was about 1.5 metres above Chart Datum. The May record low was about 8 cm below Chart Datum.
   Chart Datum is a reference level used for depths shown on navigation charts. For example, Chart Datum for Lake Erie is 173.5 metres above sea level.
6. The final chart in the electronic Bulletin summarizes some of these statistics.

Public Information Meetings

International Lake Superior Board of Control	Tuesday, June 14, 1994 Canal Park Museum 600 Lake Avenue South Duluth, Minnesota 7:30 p.m.
International St. Lawrence River Board of Control	Tuesday, June 21, 1994

Captain's Quarters
Hotel
26 East 1st Street
Oswego, New York
7:30 p.m.